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(54) **COVER PLATE WITH FLOW INDUCER AND METHOD FOR COOLING TURBINE BLADES**

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(57) **ABSTRACT**

A flow inducer assembly and a method for cooling turbine blades of a gas turbine engine are presented. The gas turbine engine includes a rotor disk having circumferentially distributed disk grooves and turbine blades. Each turbine blade includes a blade root inserted into blade mounting section of the disk groove. Seal plates are attached to aft side circumference of the rotor disk. The flow inducer assembly is integrated to each seal plate at a side facing away from the rotor disk. The flow inducer assembly is configured to function as a paddle due to rotation of the rotor disk and the seal plate therewith during operation of the gas turbine engine to drive ambient air as a cooling fluid into the disk cavity and enter inside of the turbine blade from blade root for cooling the turbine blade.